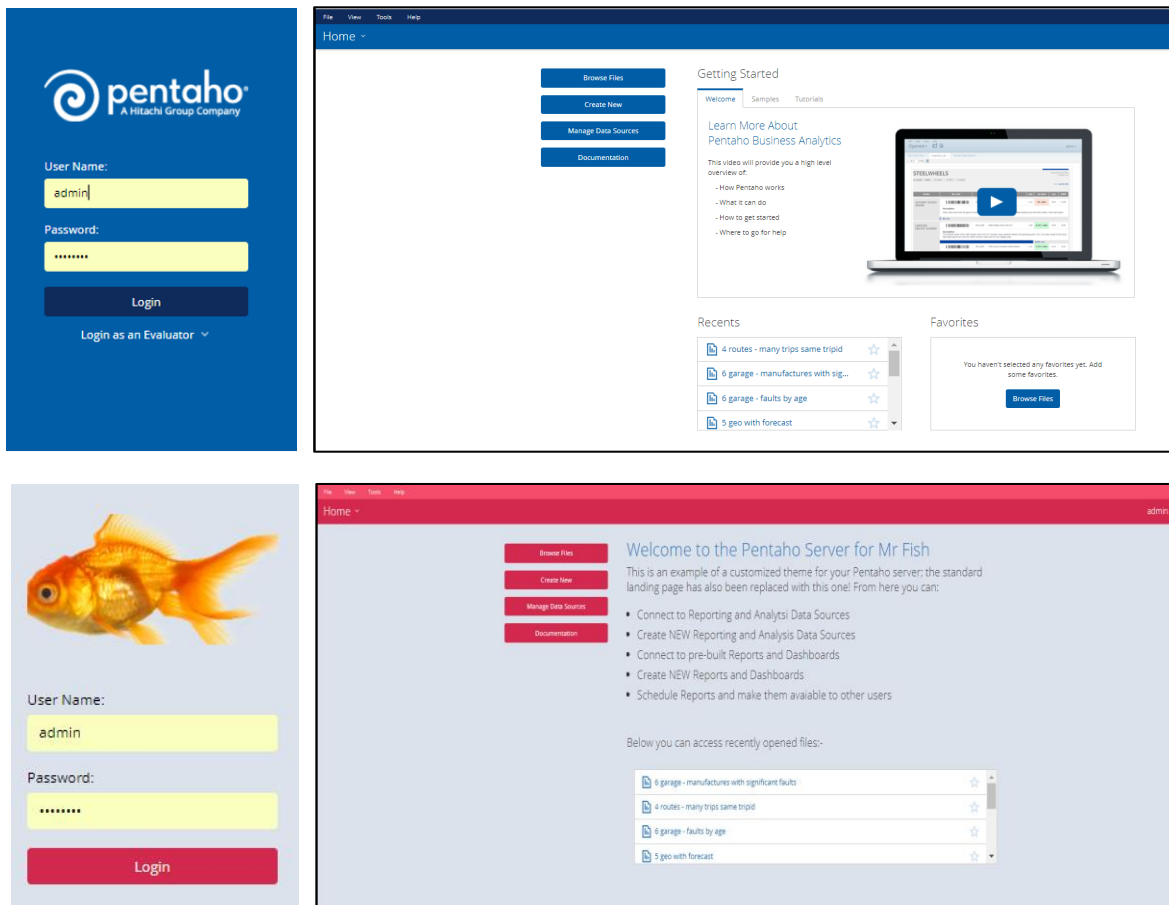# Create a Custom Theme in Pentaho Server

Michael Fish

1. Summary

This document will cover how to update configuration inside the Pentaho Server to make them updates so that you can easily change the look and feel of the server to match customers corporate identity. As an example, I take the "sapphire" theme and create a new theme called "fish":

Before we start it is important to understand the architecture of the Pentaho server and what is required to simply update a theme, or to make a new theme.
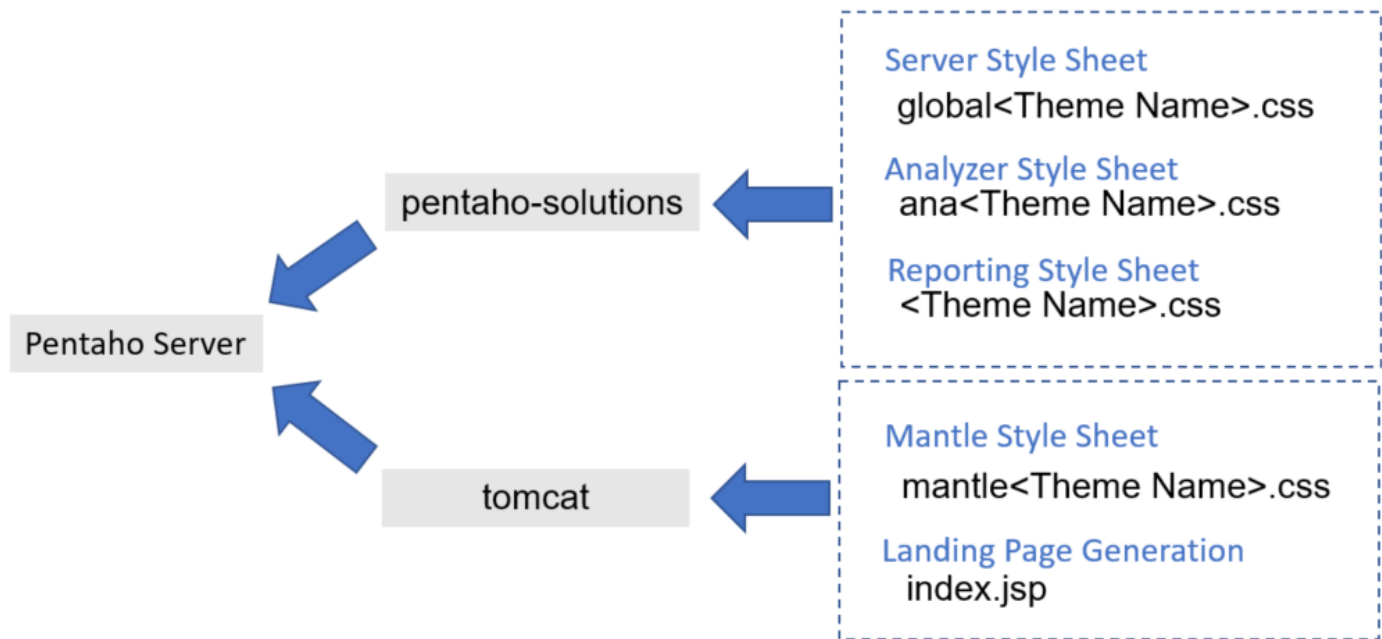
2. File Locations

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\sapphire\globalSapphire.css

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\sapphire\images\pentaho-logo-white.png

$PENTAHO_HOME\server\pentaho-server\tomcat\webapps\pentaho\mantle\themes\sapphire\mantleSapphire.css

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\analyzer\styles\themes\sapphire\anaSapphire.css

$PENTAHO_HOME \server\pentaho-server\tomcat\webapps\pentaho\mantle\home\index.jsp

Contents

3. Useful information

Anything under:

$PENTAHO_HOME/server/pentaho-server/pentaho-solutions

Requires, clear browser cache and restart of Pentaho Service.

Anything under:

$PENTAHO_HOME/server/pentaho-server/tomcat

Requires, clear browser cache only

4. Create a New Theme

You can change the theme of everything including common-ui, analyzer, dashboards and reporting. For this document we will only look at common-ui and analyzer as these have the most impact.

To customize the theme, you have 2 options:

- Update one of the standard themes (i.e. sapphire)
- Create a new theme

In this example we will create a new theme (to update an existing theme simply skip this first step). Please note if you decide to create a new theme, you must create themes for all components; i.e. common-ui, analyzer, mantle. If you do not there will be no css and the component will have default formatting. Some for speed and ease its often easier just to change an existing theme i.e. Sapphire. Note here I do not create a theme for "reporting" so this will have no custom format and have standard formatting which may not look great.

1. Add new common-ui theme

Edit the UI themes file:

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\themes.xml

Add a new theme to the file:

```
<fish display-name="Fish" system="true">
  <file>globalFish.css</file>
  <file>bootstrap/css/bootstrap-namespaced.css</file>
</fish>
```

Copy the theme folder for an existing theme i.e. sapphire

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\sapphire

To

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish

Under the new folder rename: -

globalSapphire.css to globalFish.css

2. Add new analyzer theme

Edit the analyzer themes file:

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\analyzer\themes.xml

Add a new theme to the file:

```
<fish>
  <file>anaFish.css</file>
</fish>
```

Copy the theme folder for an existing theme i.e. sapphire

$PENTAHO_HOME \server\pentaho-server\pentaho-solutions\system\analyzer\styles\themes\sapphire

To

$PENTAHO_HOME \server\pentaho-server\pentaho-solutions\system\analyzer\styles\themes\fish

Under the new folder rename: -

anaSapphire.css to anaFish.css

3. Add new mantle theme

Edit the mantle themes file:

$PENTAHO_HOME\server\pentaho-server\tomcat\webapps\pentaho\mantle\themes.xml

Add a new theme to the file:

```
<fish>
  <file>mantleFish.css</file>
</fish>
```

Copy the theme folder for an existing theme i.e. sapphire

$PENTAHO_HOME\server\pentaho-server\tomcat\webapps\pentaho\mantle\themes\sapphire

To

$PENTAHO_HOME\server\pentaho-server\tomcat\webapps\pentaho\mantle\themes\fish

Under the new folder rename: -

mantleSapphire.css to mantleFish.css

4. Set as default theme

If you wish to do so set this new theme as default under: -

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\pentaho.xml

Update default theme in the file:

 <default-theme>fish</default-theme>

Clear browser cache and Restart the Pentaho Server

When you login to Pentaho server you will see the new theme is now being used (exactly the same theme as Sapphire under the new name)
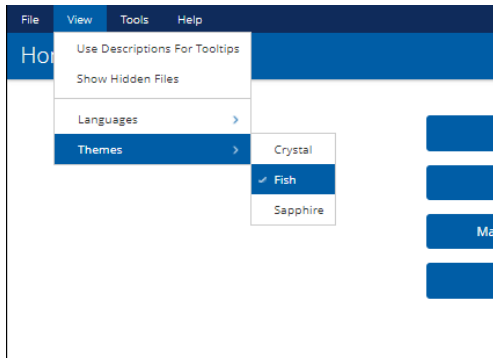
5. Update Login Page

The Sapphire login page can be seen below; we are going to make some changes to some key components:

1. Change logo
2. Change background colour + change / remove background
3. Change text colour
4. Remove "Login as an Evaluator"
5. Change the colour of the button

1. Change Login Logo

To change the logo; simply edit / replace the file:-

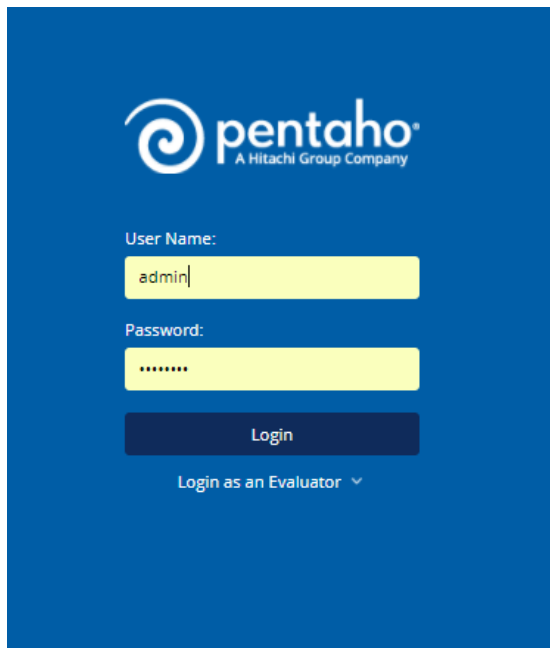$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\images\pentaho-logo-white.png

2. Change Background Colour and Image

To change the background colour and image, edit:

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\globalFish.css

- Go to Line 7539
- Change the login background to your new choice of colour: i.e. #dce2ec (blue / grey)
- I decided to remove the background so commented out the background image line

```
#login-wrapper {
    background-color: #dce2ec;
    /* background-image: url(images/login_background.svg); */
    background-repeat: no-repeat;
    background-position: bottom center;
    background-size: contain;
  height: 100%;
  width: 100%;
  position: absolute;
  overflow: auto;
}
```

3. Change Text Colour

To change the text colour, edit:

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\globalFish.css

- Go to Line 4876
- Change colour to: #000;

```
#login .input-container label {
  color: #000;
}
```

4. Remove Login as Evaluator Option

To remove the login as evaluator, edit:

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\globalFish.css

- Go to Line 6456
- Add Line - display: none;

```
#eval-users-toggle {
  font-size: 14px;
```

```
      color: #FFF;

      margin-top: 13px;

      white-space: nowrap;

      cursor: pointer;

      text-align: center;

      display:  none;

    }
```

5. Change Colour of Login Button

To change the color of the button, edit

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\globalFish.css

- Go to Line 4889
- Set background: #d4294f (dark red)

```
    #login .input-container button,

    #login .input-container button:link,

    #login .input-container button:visited,

    #login .input-container button:hover,

    #login .input-container button:active,

    #login .input-container button:focus {

      margin-top: 3px;

      width: 100%;

      text-align: center;

      border-radius: 4px;

      border: 0 none;

      padding: 8px 12px;

      line-height: 21px;

      -webkit-box-sizing: border-box;

      -moz-box-sizing: border-box;

      box-sizing: border-box;

      -webkit-box-shadow: none;

      box-shadow: none;
```

```
      height: auto;

      color: #FFF;

      background: #d4294f;

      filter: none;

    }
```

- For the Hover:
  - o   Go to Line 4910
  - o   Set background: #d4294f (light red)

```
    #login .input-container button:hover,

    #login .input-container button:active,

    #login .input-container button:focus {

      color: #FFF;

      background: #f54c69;

      filter: none;

    }
```

Clear browser cache and Restart the Pentaho Server

User Name:

admin

Password:

••••••••

Login

Login as an Evaluator ⌄

User Name:

admin

Password:

••••••••

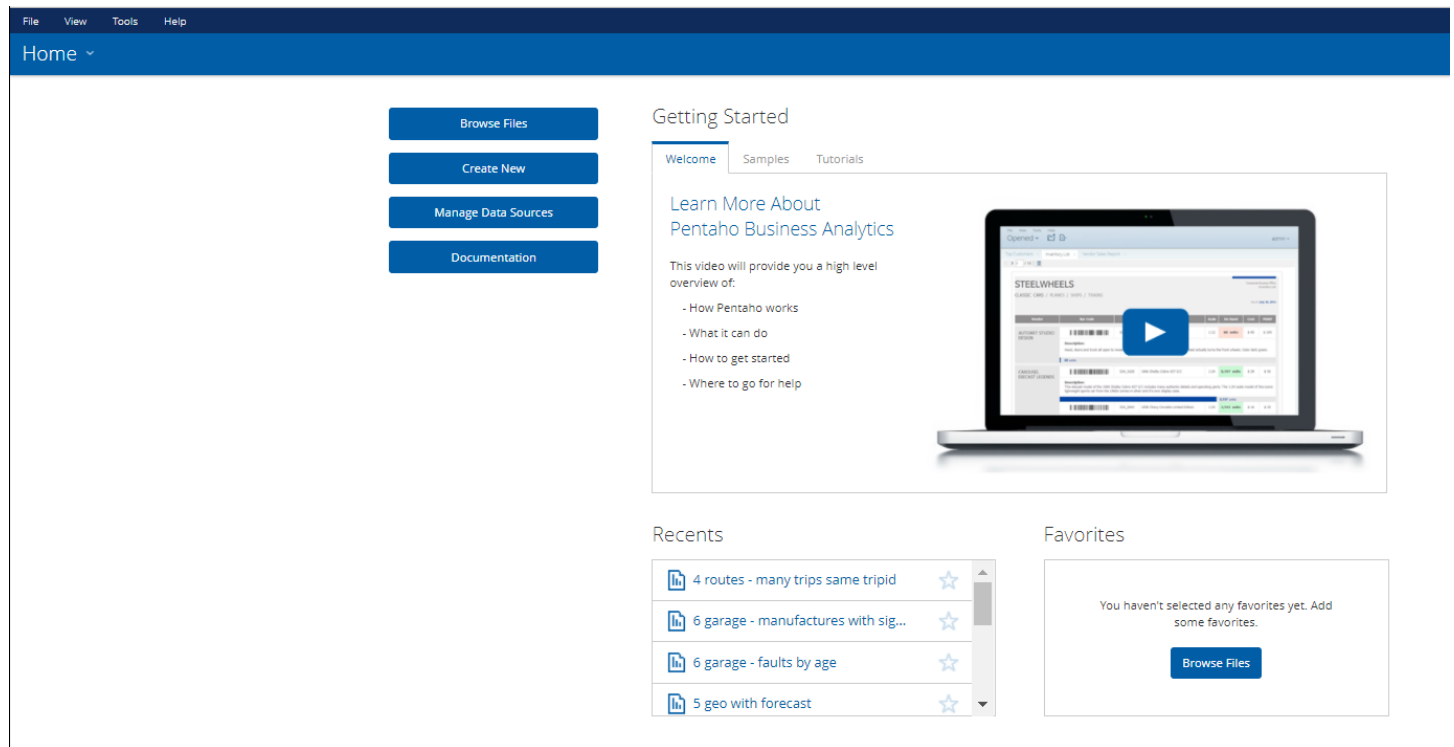**Login**

6. Update Main Theme (After login page)

After login you will see the standard Sapphire theme:

1. Update banner colours
2. Update background colour
3. Update button colour
4. Update Home, File Menu and Drop-Down colours
5. Options for updating landing page (next section)

1. Change Top Banner

To change the top banner colour, edit

$PENTAHO_HOME\server\pentaho-server\tomcat\webapps\pentaho\mantle\themes\sapphire\mantleFish.css

- Go to Line 203

- Set background: #f54c69 (light red)

```
#mainMenubar {
  padding: 0;
  position: absolute;
  top: 0;
  left: 0;
  width: 100%;
  background: #f54c69;
}
```

2. Change Second Banner

To change the second banner color, edit:

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\globalFish.css

- Go to Line 304
- Set background: #d4294f (dark red)

```
#pucHeader {
  display: block;
  height: 50px;
  background: #d4294f;
  filter: none;
  -webkit-box-shadow: 0px 0 5px rgba(0, 0, 0, 0.5);
  -moz-box-shadow: 0px 0 5px rgba(0, 0, 0, 0.5);
  box-shadow: 0px 0 5px rgba(0, 0, 0, 0.5);
  padding: 30px 0 0;
  position: relative;
}
```

3. Update Background Colour

Update background colour, edit

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\globalFish.css

- Go to Line 43
- Set background: #dce2ec (blue / grey)


```
html.bootstrap body {
  margin: 0px;
  padding: 0px;
  font-family: OpenSansRegular, sans-serif;
  font-size: 14px;
  background: #dce2ec;
  color: #333;
}
```


4. Update Button Colour

To update button colour, edit

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\globalFish.css

- Go to Line 7509
- Set background: #d4294f (dark red)


```
#buttonWrapper button,
#buttonWrapper button:link,
#buttonWrapper button:visited,
#buttonWrapper button:hover,
#buttonWrapper button:active,
#buttonWrapper button:focus {
  background: #d4294f;
  color: #FFF;
  filter: none;
  border-radius: 4px;
  -webkit-box-shadow: none;
  box-shadow: none;
```

```
    font-size: 14px;
    font-weight: 400;
    line-height: 20px;
    padding: 9px 15px;
  }
```

- For the hover
    - Go to Line 7524 (directly below above)
    - Set background: #f54c69 (light red)

```
#buttonWrapper button:hover,
#buttonWrapper button:active,
#buttonWrapper button:focus {
  background: #f54c69;
  filter: none;
  color: #FFF;
}
```

There are also a second level of buttons; when you click on create new:

- Go to Line 7020
- Set background: #d4294f (dark red)

```
.bootstrap .btn.btn-large,
.bootstrap .btn.btn-large:link,
.bootstrap .btn.btn-large:visited,
.bootstrap .btn.btn-large:hover,
.bootstrap .btn.btn-large:active,
.bootstrap .btn.btn-large:focus {
  background: #d4294f;
  filter: none;
  font-size: 14px;
  line-height: 20px;
  color: #FFF;
```

```
        padding: 9px 14px;

        font-family: opensansregular, Helvetica, Arial, Sans serif;

        border-radius: 4px;

        border: 0 none;

        -webkit-box-shadow: none;

        -moz-box-shadow: none;

        box-shadow: none;

        white-space: nowrap;

        cursor: pointer;

        outline: 0 none;

    }
```

- For the hover
  - Go to Line 7040 (directly below above)
  - Set background: #f54c69 (light red)

```
    .bootstrap .btn.btn-large:hover,

    .bootstrap .btn.btn-large:active,

    .bootstrap .btn.btn-large:focus {

      background: #f54c69;

    }
```

5. Additional Menu Formatting – Home, File, Drop Down

To format the additional menus, edit

$PENTAHO_HOME\server\pentaho-server\tomcat\webapps\pentaho\mantle\themes\sapphire\mantleFish.css

- HOME
- Go to line 890
- Set Colour (I left it as white FFF – I have added it here as depending on your banner you may need to change)

```
    .custom-dropdown-label {

      font-family: OpenSansLight, Helvetica, Arial, Sans serif;

      color: #FFF;
```

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A Hitachi Data Systems Company

```
        padding: 0 5px;
        font-size: 24px;
        padding-left: 10px;
        font-family: OpenSansLight;
        line-height: 39px;
    }
```

- DROP DOWN HOVER
- Go to line 1115
- Set background-color: #f54c69 (light red)

```
    .gwt-MenuBar-vertical tr:hover .gwt-MenuItem-selected, .gwt-MenuBar-vertical tr:hover .subMenuIcon-selected {
        background-color: #f54c69;
        color: #FFF;
    }
```

- DROP DOWN SELECTED
- Go to line 1012
- Set background-color: #d4294f (dark red)

```
    .custom-dropdown-selected {
      background-color: #d4294f !important;
      color: #FFF !important;
    }
```

- FILE MENU Part 1
- Go to line 1070
- Set background-color: #f54c69 (light red)

```
    .gwt-MenuBar-horizontal .gwt-MenuItem-selected {
      background: #f54c69;
      border: 0 none;
      color: #FFF;
```

```
    }
```

- FILE MENU Part 2
- Go to line 1129
- Set background-color: #d4294f (dark red)

```
.gwt-MenuBar-vertical .gwt-MenuItem-selected {
  background-color: #d4294f;
  color: #FFF;
}
```

- FILE MENU Part 3
- Go to line 1150
- Set background-color: #d4294f (dark red)

```
.gwt-MenuBar-vertical .gwt-MenuItem-checkbox-checked-selected,
.gwt-MenuBar-vertical .gwt-MenuItem-checkbox-unchecked-selected,
.gwt-MenuBar-vertical .gwt-MenuItem-checkbox-checked-selected:hover,
.gwt-MenuBar-vertical .gwt-MenuItem-checkbox-unchecked-selected:hover,
.gwt-MenuBar-horizontal .gwt-MenuItem-selected:hover,
.gwt-MenuBar-vertical .gwt-MenuItem-selected:hover {
  background-color; #d4294f;
  color: #FFF;
}
```
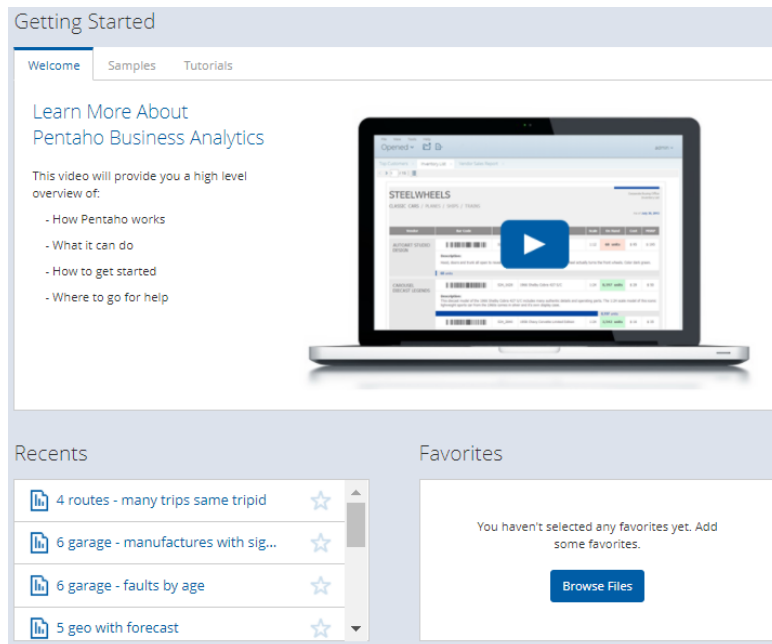
7. Landing Page

1. Updating the Main Page Content

There is a jsp file that generate the code to render the page. It is defined in the file:-

$PENTAHO_HOME server\pentaho-server\tomcat\webapps\pentaho\mantle\home\index.jsp

This file is executed when the page is loaded (there is no need to restart the server in between making changes to this). By default, it creates the landing page you are all familiar with the buttons down the left and the embedded pages to the right including the "Getting Started" links etc.

As an easy update I like to keep the buttons where they are (we have already updated the colour scheme for these in this document); but change the landing page part as you see below:

The code for this section can be found in index.jsp between lines: 152 and 285

152   <div class="span9" style="overflow:auto">

153

154   <div class="row-fluid">

………………

<!-- Landing Page Content Here! -->

………………

287   </div>

288   </div>

289   </div>

290   </div>

291

292   <script type="text/javascript">

My Example can be seen below; note I decided to keep the "Recents" list at the bottom.
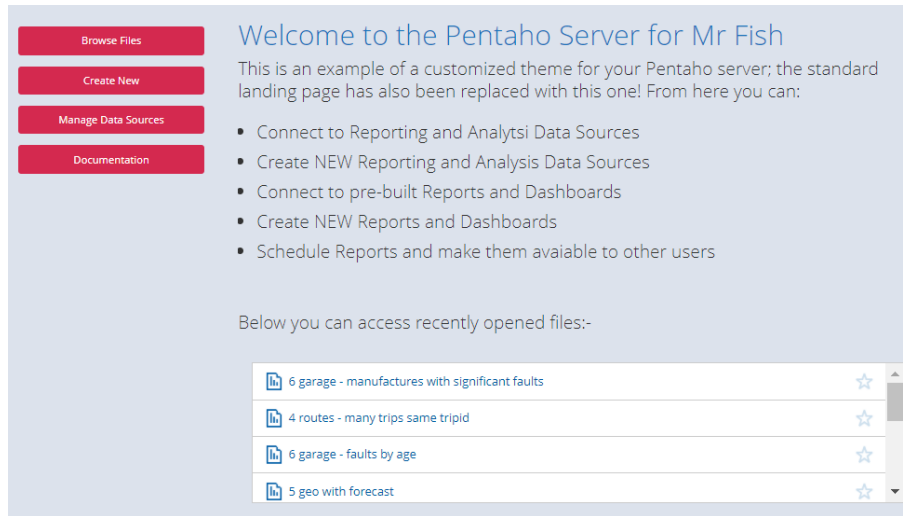
2. Update the "Recents" Plugin Colours

The "Recents" component also had the blue colour scheme for mouse over, so I again changed the hover colour, edit:

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\globalFish.css

- Go to Line 7324
- Set background: #f54c69 (light red)

.bootstrap #recentsContianer .nav-tabs.nav-stacked > li > a:hover,

.bootstrap #recentsContianer .nav-tabs.nav-stacked > li > a:active,

.bootstrap #recentsContianer .nav-tabs.nav-stacked > li > a:focus,

.bootstrap #favoritesContianer .nav-tabs.nav-stacked > li > a:hover,

.bootstrap #favoritesContianer .nav-tabs.nav-stacked > li > a:active,

.bootstrap #favoritesContianer .nav-tabs.nav-stacked > li > a:focus {

  background: #f54c69;

  color: #FFF;

}

Updated Main Screen

8. Update Analyzer

1. Cross Tab Colors

The Analyzer colours have not been updated for along time; updating these to match a corporate identity can make the whole look and feel much more appropriate.

Line							
	Classic Cars	Motorcycles	Planes	Ships	Trains	Trucks and Buses	Vintage Cars
Territory / Country	Sales	Sales	Sales	Sales	Sales	Sales	Sales
APAC — Australia	193,086	89,969	74,854	4,160	1,681	77,319	189,555
APAC — New Zeala...	167,198	99,849	46,572	34,234	8,226	23,818	155,687
APAC — Singapore	51,673	-	-	-	-	44,529	19,297
EMEA — Austria	101,459	26,048	17,860	9,025	-	20,473	27,197
EMEA — Belgium	20,137	-	5,625	31,708	9,017	-	41,926
EMEA — Denmark	157,182	-	7,586	38,697	11,476	9,589	21,106
EMEA — Finland	153,552	47,867	34,375	29,808	5,117	40,479	18,383
EMEA — France	388,951	226,390	108,156	66,487	27,341	116,982	176,610
EMEA — Germany	148,315	7,498	23,001	5,501	5,043	10,178	20,936
EMEA — Ireland	31,689	4,953	11,784	-	3,113	3,983	2,234
EMEA — Italy	133,183	11,609	113,718	17,704	6,275	8,588	112,550
EMEA — Norway	134,787	51,769	29,501	-	11,310	37,076	43,021
EMEA — Spain	476,165	74,635	89,986	124,460	43,370	177,557	229,515
EMEA — Sweden	69,088	15,567	8,900	30,916	3,808	47,931	33,804
EMEA — Switzerland	117,714	-	-	-	-	-	-
EMEA — UK	159,378	40,803	41,164	72,959	12,636	28,143	123,799
Japan — Hong Kong	-	3,846	39,649	-	-	-	5,289
Japan — Japan	47,271	26,536	49,177	18,860	3,524	13,349	29,450
Japan — Philippines	53,112	18,062	20,907	-	-	-	1,935
Japan — Singapore	81,218	4,176	-	14,156	13,279	44,498	15,664
NA — Canada	61,623	4,177	25,510	40,309	-	51,946	40,513
NA — USA	1,344,638	520,372	328,433	209,688	69,254	397,842	757,756
Grand Total	4,091,420	1,274,125	1,076,757	748,671	234,469	1,154,281	2,066,226

All theme configuration Analyzer can be found in:

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\analyzer\styles\themes\fish\anaFish.css

➤ Yellow Dimension Column Headers (to red), text to white

- Go to Line 381
- Set background: #f54c69 (light red)

```
.pivotTable .columnHeaders .columnheading {
  background-color: #f54c69;
}
```

- Hover
  - Go to Line 385
  - Set background-color: #d4294f (dark red)

```
.pivotTable .columnHeaders .columnheading:hover {
  background-color: #d4294f ;
}
```

- Go to Line 370
- Set color: #FFF;

```
.pivotTable .columnHeaders td {
  color: #FFF;
  border: 1px solid #CCC;
  border-left: none;
  border-bottom: none;
}
```

➢ After setting colour for header text to white; need to set nested columns text back to black

- Go to Line 397
- ADD color: #000000 (black text)

```
pivotTable .columnHeaders .member {
  background-color: #F8F8F8;
  color: #000000;
}
```

➢ Yellow Dimension Row Headers (to light red), text to white

- Go to Line 434
- Set background: #f54c69 (light red)
- Set color: #FFF (white text)

```
.pivotTable .rowLabelHeaders td {
 color: #FFF;
 background-color: #f54c69;
 border: 1px solid #CCC;
 border-right: none;
}
```

- Hover
  - o Go to Line 441
  - o Set background-color: #d4294f (dark red)

```
  .pivotTable .rowLabelHeaders td:hover {
    background-color: #d4294f;
  }
```

➢ Update Measure Value (to dark blue), text to white

- Go to Line 418
- Set background-color: #BCE9F9 (light blue)
- Set color: #FFF (white text)

```
.pivotTable .columnHeaders .metric {
 background-color: #BCE9F9;
 color: #FFF;
}
```

- Hover

- o Go to Line 422
- o Set background-color: #006488 (dark blue)

```
.pivotTable .columnHeaders .metric:hover {
  background-color: #006488;
}
```

Territory	Country	Classic Cars Sales	Motorcycles Sales	Planes Sales	Ships Sales	Trains Sales	Trucks and Buses Sales	Vintage Cars Sales
APAC	Australia	193,086	89,969	74,854	4,160	1,681	77,319	189,555
	New Zeala...	167,198	99,849	46,572	34,234	8,226	23,818	155,687
	Singapore	51,673	-	-	-	-	44,529	19,297
EMEA	Austria	101,459	26,048	17,860	9,025	-	20,473	27,197
	Belgium	20,137	-	5,625	31,708	9,017	-	41,926
	Denmark	157,182	-	7,586	38,697	11,476	9,589	21,106
	Finland	153,552	47,867	34,375	29,808	5,117	40,479	18,383
	France	388,951	226,390	108,156	66,487	27,341	116,982	176,610
	Germany	148,315	7,498	23,001	5,501	5,043	10,178	20,936
	Ireland	31,689	4,953	11,784	-	3,113	3,983	2,234
	Italy	133,183	11,609	113,718	17,704	6,275	8,588	112,550
	Norway	134,787	51,769	29,501	-	11,310	37,076	43,021
	Spain	476,165	74,635	89,986	124,460	43,370	177,557	229,515
	Sweden	69,088	15,567	8,900	30,916	3,808	47,931	33,804
	Switzerland	117,714	-	-	-	-	-	-
	UK	159,378	40,803	41,164	72,959	12,636	28,143	123,799
Japan	Hong Kong	-	3,846	39,649	-	-	-	5,289
	Japan	47,271	26,536	49,177	18,860	3,524	13,349	29,450
	Philippines	53,112	18,062	20,907	-	-	-	1,935
	Singapore	81,218	4,176	-	14,156	13,279	44,498	15,664
NA	Canada	61,623	4,177	25,510	40,309	-	51,946	40,513
	USA	1,344,638	520,372	328,433	209,688	69,254	397,842	757,756
Grand Total		4,091,420	1,274,125	1,076,757	748,671	234,469	1,154,281	2,066,226

2. Dimension and Measure Pill Colors
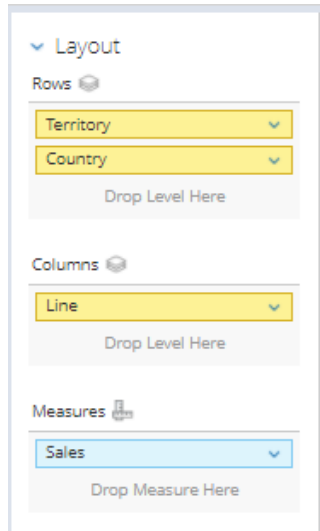
1. Update Dimension Pills from Yellow to Red
2. Update Measure Pills from Pale Blue to Blue

It makes good practice to update the "pill" or "gem" colours to match the colours used for dimensions and measures inside the cross tab, edit:

$PENTAHO_HOME\server\pentaho-server\pentaho-solutions\system\common-ui\resources\themes\fish\globalFish.css

➢ Update Dimension Yellow Pill to Red

- Go to Line 6137
- Set background: #f54c69 (light red)
- Add color: #FFF (white text)

```
.gem {
  height: 17px;
  border-radius: 0px;
  padding: 1px 5px;
  margin-bottom: 4px;
  min-width: 120px;
```

```
      background: #f54c69;
      color: #FFF;
      border: 1px solid #D6B225;
    }
```

- Hover
  - o   Add a new function, as not to have to edit the parent CSS (dark red)

```
  .propPanelItem .gem:hover {
        background-color: #d4294f;
        border: 1px solid #d4294f;
  }
```

➢ Update Measure Light Blue Pill to Blue

- Go To 6160
- Set background: #068ebf (light blue)

```
.propPanel_gemBar.number .gem {
  background: #068ebf;
  color: #FFF;
  border: 1px solid #7EC9F2;
}
```

- Hover
  - o   Add a new function, as not to have to edit the parent CSS (dark blue)

```
.propPanel_gemBar.number .dojoDndContainerOver .gem:hover {
    background-color: #006488;
    border: 1px solid #006488;
}
```

9. Things to Consider

In this document I have given examples on how to change the key formatting properties that can help define a custom theme; but bear in mind, If you use a dark colour for a background, you may need to change overlaying text to a light colour. Whilst I have covered most of the main properties there are 10's thousands of lines of CSS and I couldn't possibly cover it all; so there may be occasions when a change means hunting for some other CSS that is affected.

Also bear in mind that there are many icons that are used within the console; for example, the save icon is white, so if you put this on a white background you won't see it; you can update the icons but that would be additional effort.

Next Steps: I plan of creating a config file and script that will allow people to automatically update all the properties for a theme as defined in this document.

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